

Remarks

In view of the above amendments and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested. Upon entry of this amendment, claims 1-5, 7-10, 12-16 and newly added claims 39-54 will remain in the application. Claims 1-5, 7-10, and 16 have been amended. Claims 6 and 11 have been canceled, and claims 17-38 are withdrawn pursuant to telephonic election of claims 1-16 with traverse.

Claims 7-8 have been rejected under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Patent Office has required the Applicant to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. The Patent Office states that claim 1 requires the glass body to be pre-deuterated at the time of consolidation, but claims 7-8 require that prior to the consolidated step the glass body be deuterated, and therefore claims 7-8 would have the consolidation be done post-deuteration, which is impossible because claim 1 requires it to be pre-deuterated, and therefore claims 7-8 do not further limit claim 1.

The Patent Office has rejected claims 1-6 and 9-12 under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Patent Office notes that claim 1 refers to "pre-deuterated" and states that there is no definition for the term, and that the Examiner could not find the term in any prior art. With regard to claim 1, the Patent Office states that line 10 should begin with "one". With regard to claims 7-8, the Patent Office notes that the claims refer to "glass bodies" but there is no antecedent basis for "glass bodies", and it is unclear if claims 7-8 require that there be bodies, or if there are a plurality of bodies, then one is deuterated. The Patent Office also notes that claim 10 refers to "the soot body using glass plugs", but there is no antecedent basis for any body using glass plugs, and one would be confused as to whether this was the body of claim 1 or the "further" created soot structure of claim 10. The Patent Office states that in claim 11 there is no antecedent basis for "the soot body using pre-deuterated glass plugs".

The Patent Office has rejected claims 1-3, 9, and 12-15 under 35 USC § 103(a) as being unpatentable over Berkey U.S. Patent No. 5,917,109. The Patent Office states that Berkey discloses the invention at col. 8, line 46 to col. 9, line 5. The Patent Office notes that a tube can be a plug as seen in the present specification in paragraph 134, line 3. The Patent Office states that Berkey does not disclose that the plug is ever deuterated, and it would have been obvious to never deuterate the Berkey plug, because there is no disclosure to do so, and because it would take extra time and money to deuterate. The Patent Office further states that any glass that has never been deuterated is clearly a pre-deuterated glass because it is prior to any deuteration. With regard to claim 2, the Patent Office states that it is clearly met in as much as the present invention meets it. The Patent Office also states that claim 3 "further" comprises making another glass preform, and it would have been obvious to perform the Berkey method multiple times and simultaneously so as to make as much fiber as quickly as possible, which would result in two preforms being formed with sealed centerline holes simultaneously with each other. With regard to claim 9, the Patent Office states that it would have been obvious to make additional preforms, which would require further depositing a further soot on a further handle, and that it would have been obvious to use glass, prior to any deuteration thereof, because there is no disclosure of deuteration, and to avoid the cost and time needed for deuteration. With regard to claims 12 and 15, the Patent Office refers to col. 9, lines 24-27. The Patent Office states that claims 13-14 are met by another but similar process disclosed at figures 1-3 and col. 4, line 46 to col. 5, line 32, where 10 is the substrate, 13 shows the depositing of soot, 19 is the inserted glass body/plug into the bore from which the substrate is removed, and wherein figure 3 shows the overcladding of claim 13, and the consolidation of claim 14 is disclosed at col. 6, lines 46-56.

The Patent Office has rejected claim 16 under 35 U.S.C. 103(a) as being unpatentable over Berkey as applied to claim 1, and further in view of Freund U. S. Patent No. 4,685,945. The Patent Office states that Berkey does not teach deuteration of the fiber, however, Berkey discusses reducing water/hydroxyl contamination, referring to col. 2, lines 25-28 and col. 3, lines 19-24. The Patent Office states that Freund is directed to improving fibers of low-hydroxyl fibers, referring for instance col. 2 lines 57-63. The Patent Office concludes that it would have been obvious to perform the Freund method (referring to claim 1) on the Berkey fiber, for the advantages that Freund discloses.

The Patent Office has indicated that claims 4-6 and 10-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph and to include all of the limitations of the base claim and any intervening claims. The Patent Office states that the prior art does not disclose a step of plugging one end with a glass body, along with a further step of plugging both ends, for a total of at least 3 plugs.

With regard to the term “pre-deuterated”, Applicants submit that the term refers to a glass body which has been deuterated prior to a certain method step, for example as found in the Specification of the present application on page 27, paragraph 0138: “Moreover, we have found that by substantially replacing the OH ions in glass bodies such as plug 60 before inserting same into, onto, or near the soot body 38, i.e. by pre-deuterating the glass body, rewetting of the centerline hole region could be even further prevented.” Additionally, as found on page 27, paragraph 0139 of the Specification, “...ultra low optical attenuation at 1383 nm can be achieved by preferably utilizing at least one deuterated glass body ...”, and on page 28, paragraph 0140: “Even more preferably, all glass bodies which are to be placed in contact with the centerline hole before disposing same in, on, or near a soot body or silica-based reaction product or sintered glass perform are pre-deuterized.”. By way of another example, Example 1 on page 32, paragraph 0160 of the present Specification indicates that a “...previously deuterated membrane ballast plug was inserted into the other end of soot perform ...”. Thus, the term “pre-deuterated” would be understood in light of the Specification and usage of the term therein to mean deuterated prior to one or more method steps. Thus, originally filed claims 7-8 did further limit claim 1. The claims have been amended for further clarification. Accordingly, Applicants request reconsideration of claims 7-8 as amended and removal of the objection under 37 CFR 1.75(c).

Applicants submit that the amendments to the claims address the rejections under 35 U. S. C. 112, second paragraph and further clarify the claimed subject matter, and request reconsideration of the rejected claims and withdrawal of the rejection.

Applicants traverse the rejections under 35 U. S. C. 103(a). Neither Berkey nor Freund discloses or even suggests inserting a deuterized glass body into a soot body (i.e. pre-deuterized, i.e. deuterized prior to insertion into the soot body) or depositing soot onto a deuterized tubular glass body.

Accordingly, Applicants request reconsideration of the claims as amended and withdrawal of the rejections under 35 U. S. C. 103(a).

With regard to the Information Disclosure Statement, Applicants request that the Examiner confirm that reference "CB", WO 00/64825, which was published in the English language, was considered by the Examiner. The initialed Form PTO-1449 appears to have an inadvertent omission of the Examiner's initials. Applicants request another initialed copy of the Form PTO-1449 indicating that the reference was considered.

Based upon the above amendments, remarks, and papers of record, Applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests reconsideration of the pending claims 1-5, 7-10, 12-16 and 39-54 and a prompt Notice of Allowance thereon.

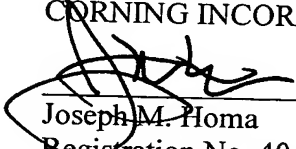
Applicant believes that a one month extension of time is necessary to make this Response timely. Should Applicant be in error, Applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.


Please direct any questions or comments to Joseph M. Homa at 607-974-9061.

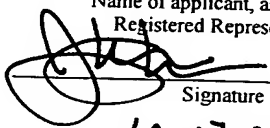
Respectfully submitted,

CORNING INCORPORATED

Date: Oct. 17, 2003


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